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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/525, 564 03/15/00 FIERO

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EXAMINER

THAI, C

ART UNIT PAPER NUMBER

2173

DATE MAILED:

05/30/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/525,564	RICHARD FIERO
Examiner	Group Art Unit
CUONG T. THAI	2173

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- Responsive to communication(s) filed on _____.
- This action is **FINAL**.
- Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- Claim(s) 1 - 21 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- Claim(s) _____ is/are allowed.
- Claim(s) 1, 3 - 19, 21 is/are rejected.
- Claim(s) 2, 20 is/are objected to.
- Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The proposed drawing correction, filed on _____ is approved disapproved.
- The drawing(s) filed on _____ is/are objected to by the Examiner.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - All
 - Some*
 - Noneof the CERTIFIED copies of the priority documents have been
 - received.
 - received in Application No. (Series Code/Serial Number) _____.
 - received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- Information Disclosure Statement(s), PTO-1449, Paper No(s). 2 Interview Summary, PTO-413
- Notice of Reference(s) Cited, PTO-892 Notice of Informal Patent Application, PTO-152
- Notice of Draftsperson's Patent Drawing Review, PTO-948 Other _____

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Part III DETAILED ACTION

Specification

1. Claims 1-21 are presented for examination.
2. Applicant is reminded of the duty to fully disclose information under 37 CFR 1.56.

Claim Rejections - 35 USC § 112

3. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. Specially, "holding the device of claim 1" does not distinctly incorporate parent claim 1's limitations.
4. The title of the invention is objected to because it is too broad. The new recommended title should be rewritten as follow:
Portable device comprising keypad and screen.

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 3-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slipy et al. (USPN: 5,848,152) hereinafter Slipy in view of Collins (USPN: 6,038,313).

As per claim 1, Slipy teaches a portable electronic device, comprising:

a housing comprising a front and back surface, the front surface comprising an upper region and a lower region as the

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housing 102 which includes the front face 130 and the rear face 132 (see column 5 lines 16-17) and wherein the front face include the upper region 114 and lower region 108 (see column 5, lines 2-8).

Slipy, however, does not disclose the limitations of an input keypad in or proximal to the upper region, the input keypad comprising input keys for inputting each number in a ten digit and a display screen in or proximal to the lower region, the display screen providing an output for at least one or more numbers inputted from the input keypads.

Collins discloses the limitations of an input keypad in or proximal to the upper region, the input keypad comprising input keys for inputting each number in a ten digit and a display screen in or proximal to the lower region, the display screen providing an output for at least one or more numbers inputted from the input keypads as the technique of option keys 27 on the upper region and display 28 can be used to display information produced by an option key on the lower region(see column 3, lines 49-50).

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to include the limitations of an input keypad in or proximal to the upper region, the input keypad comprising input keys for inputting each number in a ten digit and a display screen in or proximal to the

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lower region, the display screen providing an output for at least one or more numbers inputted from the input keypads by Collins for that of Slipy. By doing so, the system would enhance by supplying better electronic device which can fixed user's desired reached location to end users.

As per claim 18, due to the similarity of this claim to that of claim 1, this claim is therefore rejected for the same line of reasons applied to claim 1.

As per claims 3-5, Slipy discloses the invention substantially as claimed. Slipy, however, does not discloses the limitations of wherein the housing, the display screen and the input keypad each comprising at least one orientational axis, wherein the relative orientational axis are substantially parallel(see claim 3), substantially non-parallel(see claim 4), and wherein the angle formed between the relative orientational axis of the display screen and the relative axis of the housing is greater than zero(see claim 5).

Colins discloses the limitations of wherein the housing, the display screen and the input keypad each comprising at least one orientational axis, wherein the relative orientational axis are substantially parallel, substantially non-parallel, and wherein the angle formed between the relative orientational axis of the

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display screen and the relative axis of the housing is greater than zero as the technique of the housing which comprising the display screen and the input keypad relatives to the X axis(see Fig. 1b).

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to include the limitations of wherein the housing, the display screen and the input keypad each comprising at least one orientational axis, wherein the relative orientational axis are substantially parallel, substantially non-parallel, and wherein the angle formed between the relative orientational axis of the display screen and the relative axis of the housing is greater than zero by Collins into that of Slipy's invention. By doing so, the system would enhance by allowing manufacturer easy to install the electronic device's components as well as its parts.

As per claim 6, the limitation of wherein the housing, the display screen, and the input keypad each comprise at least one relative orientational axis, wherein each relative orientational axis comprises one or more distance selected from the group consisting of: a width, a base, a height, and a non-diagonal length is taught by Slipy as the technique of mechanical design of the radiotelephone handset 100 has been carefully designed in order to optimize the raditelephone hanset 100 for space, weight,

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styling, etc. including ergonomic factors such as the size and positioning of elements of the user interface 110 and the shape and contour of the handset 100 (see column 4, lines 40-45). This claim is therefore rejected for the reason as set forth above.

As per claim 7, the limitation of wherein the front or the back surface of the housing forms at least one shape selected from the group consisting of : a regular n-sided polygon, an irregular n-sided polygon, a triangle, a square, a rectangle, a trapezoid, a circle, and an oval is taught by Slipy as the technique of radio telephone handset 100 is adapted to accommodate a plurality of distinctive telephone appearances. In the preferred embodiment of the present invention, this is accomplished by the faceplate 104 having a distinctive user interface appearance. The distinctive user interface appearance is evidenced by the distinguished appearance, or unique look, that the face plate gives to the earpiece interface 112, the display interface 114, the keypad interface 116, and the microphone interface 118. In the preferred embodiment, the distinctive appearance is accomplished by selecting the contour, shape, size, texture, material and color of the faceplate (see column 4, lines 12-23). This claim is therefore rejected for the reason as set forth above.

As per claim 8, the limitation of wherein an external surface of the display screen and of the input keypad individual comprise at least one shape independently selected from the group consisting of: a regular n-sided polygon, an irregular n-sided polygon, a triangle, a square, a rectangle, a trapezoid, a circle, and an oval is taught by Slipy as the technique of the distinctive user interface appearance is evidenced by the distinguished appearance, or unique look, that the face plate gives to the earpiece interface 112, the display interface 114, the keypad interface 116, and the microphone interface 118. In the preferred embodiment, the distinctive appearance is accomplished by selecting the contour, shape, size, texture, material and color of the faceplate(see column 4, lines 17-23). This claim is therefore rejected for the reason as set forth above.

As per claim 11, Slipy discloses the invention substantially as claimed. Slipy, however, does not discloses the limitation of the input keypad further comprising additional input keys for input letters from an alphabet or commands represented by abstract.

Collins discloses the limitation of the input keypad further comprising additional input keys for input letters from an

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alphabet or commands represented by abstract as the technique of option key such as names and telephone numbers which may be stored in the telephone's directory. Similarly, the user could handwrite notes on the blank portion of the display 28, using a special pen which notes can either be stored in the telephone's storage area or else the notes can optionally be sent by facsimile transmission to a desired telephone number using a facsimile number using facsimile transmission option key(see column 3, lines 50-57).

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to include the limitation of the input keypad further comprising additional input keys for input letters from an alphabet or commands represented by abstract by Collins for that of Slipy invention. By doing so, the system would enhance by providing better telecommunication service to end users.

As per claim 12, the limitation of wherein at least a portion of at least one of the input keys of the input keypad is elevad or depressed relative to the front surface is taught by slipy as the technique of the plurality 124 of keypad holes form a part of the keypad interface 116 and permit electrical and mechanical contact between the individual keys 108 of the keypad 106 and the control circuitry contained within the housing

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102 (see column 5, lines 2-6). This claim is therefore rejected for the reason as set forth aboved.

As per claim 13, the limitation of wherein the device comprises one or more of : a telephone, a telephone headset, a cellularaphone, a cordless telephone, a cordless telephone headset, a calculator, a computer, an electronic organizer, a personal information manager, a personal digital assistance, a television, a global positioning device, a paging device, a radio, a CB radio, or a short-wave radio is taught by Slipy as the technique of radiotelephone hanset 100 accordingly to the present invention.....In the preferred embodiment of the present invention, the radiotelephone hanset 100 is a cellular radiotelephone handset for operation within a wide-area cellular network. Alternatively, the radiotelephone handset 100 may be a cordless radiotelephone handset, a personal communicator, or any other two-way communication device(see column 3, lines 56-65). This claim is therefore rejected for the reasons as set forth aboved.

As per claim 14, the limitation of wherein the device comprises additional elements comprising a microphone, a speaker, or an antenna is taught by Slipy as a microphone interface 118 (column 4 line 9), an antenna 103(column 4 line 1), and earpiece

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interface 112 that permits acoustic coupling between the user's ear and a speaker contained within the housing 102 (column 5, lines 13-16). This claim is therefore rejected for the reason as set forth above.

As per claim 15, the limitation of wherein a portion of the front surface is movable relative to the back surface or wherein the portion of back surface is movable relative to the front surface is taught by Slipy as the technique of the radiotelephone which include faceplate 104 (column 3 line 58) which removable from rear face 132 (column 5 line 18) (see Figs. 1 & 2). This claim is therefore rejected for the reason as set forth above.

As per claim 19, the limitation of wherein the one or more fabrication technique comprises one or more of : rejection molding, compression molding, cast molding, die cutting, or laser cutting is taught by Slipy as the technique of the faceplate 104 having a distinctive user interface appearance. The distinctive user interface appearance is evidenced by the distinguished appearance, or unique look, that the face plate gives to the earpiece interface 112, the display interface 114, the keypad interface 116, and the microphone interface 118. In the preferred embodiment, the distinctive appearance is accomplished by selecting the contour, shape, size, texture, material and

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color of the faceplate(see column 4, lines 17-23). This claim is therefore rejected for the reason as set forth aboved.

As per claim 21; due to the similarity of this claim to the combination of claims 1, 13, and 14; inconjunction with wherein holding the device in at least one hand is taught by Slipy as the technique of the radiotelephone handset 100 is portable in that it is hand held by a user(see column 3, lines 65-66). This claim is therefore rejected for the reasons as set forth aboved.

As per claims 16 and 17, Slipy discloses the invention substantially as claimed. Slipy, however, does not disclose the limitations of wherein at least one dimension of the device is capable of change (see claim 16) and wherein the at least one dimensional change comprises telescoping or folding a portion of the device in at least one dimension.

Collins discloses the limitations of wherein at least one dimension of the device is capable of change and wherein the at least one dimensional change comprises telescoping or folding a portion of the device in at least one dimension as the technique of the flap 16 in an open position, having moved about the hinge 18 from the closed position of Fig. 1a. Fig. 1b shows a display area 28, which was hidden by flap 16 when the flap was in the closed position(see column 3, lines 4-8 and Figs. 1a & 1b).

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It would have been obvious to one having ordinary skilled in the art at the time the invention was made to include the limitation of one dimension of the device is capable of change and wherein the at least one dimensional change comprises folding a portion of the device by Collins into that of Slipy. By doing so, the device would enhance by providing compact opportunity to end users.

As per claim 9, Slipy discloses the invention substantially as claimed. Slipy, however, does not disclose the limitation of wherein the display screen displays textual information, graphical information, or video information.

Collins discloses the missing limitation as the technique of the display 26 may also have options allowing user to send or receive facsimile transmissions (see column 3, lines 1-3).

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to include the limitation of display textual infomation by Collins for that of Slipy's invention. By doing so, the system would enhance by providing desired information on electronic device to end users.

As per claim 10, Slipy discloses the invention substantially as claimed. Slipy, however, does not disclose the limitation of

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wherein one or more of the input keypad comprises at least one symbol.

Collins discloses the limitation of wherein one or more of the input keypad comprises at least one symbol as the technique of telephone directory symbol 27(see Figs. 1a & 1b).

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to include the limitation of wherein one or more of the input keypad comprises at least one symbol by Collins into that of Slipy's invention. By doing so, the system would enhance by providing easy-to-understand symbols information to end users.

Allowable Subject Matter

7. Claims 2 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is an examiner's statement of reasons for allowance:

The examiner has carefully considered each of the two dependent claims 2 and 20 drawn to a portable electronic device

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wherein the display screen, the input keypad, or both, can be rotated relative to the housing.

None of Collins (USPN: 6,038,313), Slipy et al. (USPN: 5,848,152), Nishiyama et al. (USPN: 5,937,360), Campo (USPN: 6,073,033), Sudo (USPN: 5,999,827), Robb (WO 97/26744), Suzuki et al. (USPN: 5,956,655) disclose the limitation of wherein the the display screen, the input keypad, or both, can be rotated relative to the housing.

Conclusion

9. The prior art made of record and relied upon is considered pertinent to applicant's disclosure:

10. A shortened statutory period for response to this action is set to expire THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cuong T.

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Thai whose telephone number is 703-308-7234. The examiner can normally be reached on Monday-Friday from 7:30 AM to 4:00 PM.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051 (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

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CTT.

May 24, 2001



RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173